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Approved for use through 03/31/2007. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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| TRANSMITTAL FORM (to be used for all correspondence after initial filing)   |  |  | Application Nu   | mber          | 09/862   | 09/862,688   |  |
|---|--|--|--|---------------|--|--|--|
|   |  |  | Filing Date  |               | May 2  | May 22, 2001   |  |
|   |  |  | First Named Inventor D. Mauer et al.   |               | uer et al.   |  |  |
|   |  |  | Art Unit 3726  |               |  |  |  |
|   |  |  | Examiner Nam   | е             | E. Om  | gba  |  |
| Total Number of Page  | s in This Submission                     |  | Attorney Docke   | t Number      | 0275N  | I-000260/DVB   |  |
|   |  | ENCLOS                                     | URES (check al   | that apply    | )  |  |  |
| Fee Transmittal F   | -<br>Form                                | ☐ Drawing(s)                               |  | . —           | After Allowance Communication to Technology Center (TC)                            |  |  |
| Fee Attached  |  | Licensing                                  | g-related Papers   |               |  | Appeal Communication to Board of Appeals and Interferences |  |
| Amendment / Rep   | oly                                      | Petition                                   |  |               |  | peal Communication to TC peal Notice, Brief, Reply Brief)  |  |
| After Final   | :  |  | o Convert to a nal Application   |               | Pro  | prietary Information                                       |  |
| Affidavits/dec  | laration(s)                              |  | Attorney, Revoc<br>of Corresponden   |               | ☐ Sta  | Status Letter  |  |
| Extension of Time   | e Request                                | Terminal Disclaimer                        |  |               | Other Enclosure(s) (please identify below):  |  |  |
| Express Abandonment Request   |  | ☐ Request for Refund ☐ CD, Number of CD(s) |  |               | Form 1449; 9 Foreign<br>References; 1 US Reference;<br>and Return Receipt Postcard |  |  |
| Information Disclosure Statement  |  |  |  |               |  |  |  |
| Certified Copy of Priority Document(s)  |  | Remarks                                    | The Commissioner is hereby authorized to charge any additional fees that may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 02-2550. A duplicate copy of this sheet is enclosed. |               |  |  |  |
| Response to Missing Parts/ Incomplete Application   |  |  |  |               | ,  |  |  |
| Response to Missing Parts under 37 CFR 1.52 or 1.53   |  |  |  |               |  |  |  |
|   | SIGNA                                    | TURE OF AP                                 | PLICANT, AT  | TORNEY,       | OR AGEN  | T  |  |
| Firm<br>or<br>Individual name   | Firm or Harness, Dickey & Pierce, P.L.C. |  | Attorney Nan<br>Monte L. Fal   | Name Reg. No. |  | •  |  |
| Signature   |  |  | 11/1   |               |  |  |  |
| Date  |  |  |  |               |  |  |  |
| CERTIFICATE OF TRANSMISSION/MAILING   |  |  |  |               |  |  |  |
| I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an epvelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. |  |  |  |               |  |  |  |
| Typed or printed name Monte L. Falcoff  |  |  | P  |               | Express Mail<br>Label No.  | EV 755 416 687 US (6/11/2007)                              |  |
| Signature   |  | 1811                                       |  |               | Date   | June 11, 2007  |  |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

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### **PATENT**

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

09/862,688

Filing Date:

1 1 2007 T I VILLE

May 22, 2001

Applicant:

D. Mauer et al.

Group Art Unit:

3726

Examiner:

E. Omgba

Title:

RIVETING SYSTEM AND PROCESS FOR FORMING A

**RIVETED JOINT** 

Attorney Docket:

0275M-000260/DVB

Director of the United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

## SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

# I. LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION

The patents, publications and other information requested to be considered by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

# II. COPIES

A. Submitted herewith is a legible copy of (i) each foreign patent; (ii) each publication or that portion which caused it to be listed, other than U.S. patents and U.S. patent application publications unless required by the Office; (iii) each unpublished U.S. application listed below in Section IV (i.e., including the specification, claims, and any drawing of the application, or that portion of the application which caused it to be listed, including any claims directed to that portion), except for such applications filed on or after June 30, 2003, pursuant to the Waiver of the Copy Requirement in 37 C.F.R. 1.98 (OG Notice dated October 19, 2004); and (iv) all other information or that portion which caused it to be listed.

|        | B. Any patents, publications or other information which are listed on Form 1449 or on the copies of PTO-892, but which are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:  |
|--------|---|
| , et ' | C. This is a PCT application in the entry of the National Phase in the United States. A copy of the International Search Report is attached for the Examiner's information. The documents listed on the International Search report are listed on the attached Form 1449 for consideration by the Examiner and for listing on any patent resulting from this application. If the International Search report was from the US, EPO, or JPO search authorities, copies of these references should have been supplied to the USPTO under the trilateral agreement and are believed to be in the file of the above-identified application. (MPEP 1893.03(g).) |
| III.   | CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)   |
|        | A. $\boxtimes$ Except as may be indicated below in (B), all of the patents, publications or other information are in the English language (concise explanation not required).   |
|        | B. \( \subseteq \) A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)):   |
|        | 1. See the attached foreign patent office communication from a counterpart foreign application:   |
|        | 2. X English translations are provided:   |
|        | As noted on attached Form 1449.   |
|        | 3.  Other:  |
|        | FOREIGN PATENTS:  |
|        | #1. Japanese Patent No. 58-131939 appears to show an apparatus for setting a rivet to sheet material.   |
|        | #2. Japanese Patent No. 62-109838 appears to show a   |

#3. Japanese Patent No. 63-002534 appears to show a pressing and setting machine.

grommet setting tool.

#4. Japanese Patent No. 64-40132, according to an English translation of the Abstract, shows the following:

PURPOSE: To remove noise in a working time and to obtain a miniaturized device by caulking a rivet by a linearly reciprocating stem through a worm wheel mechanism which is situated in an oil bath and lubricated amply. CONSTITUTION: A worm wheel mechanism 5 rotated by the rotation of a driving shaft 4a is situated in an oil bath fixed at a column 3. The driving force of the worm wheel mechanism 5 is transferred to a stem 18 through a connective rod 12, etc. A stem 18 and a chuck 22c conduct a linear motion to caulk a rivet held by the chuck 22. Noise occurring when the device operates is removed and the device is miniaturized by such a structure.

#5. Japanese Patent No. 4-169828, according to an English translation of the Abstract, shows the following:

PURPOSE: To make it possible to provide constant riveting force regardless of the length of a hose for connecting a pressure-oil supply source, which is different for each riveting machine, and the riveting machine by fixing a sensor which transmits an electric signal in proportion to the amount of strain to the yoke of the riveting machine. CONSTITUTION: A sensor 2 which converts the amount of mechanical strain into an electric signal in proportion to the amount of the strain and transmits the signal is fixed to a yoke 9 of a riveting machine 8. At the same time, a measuring device which measures the riveting force of the riveting machine 8 is mounted on the riveting machine 8. With the riveting pressure being measured with the measuring device, riveting is performed with the specified riveting pressure. Then, the magnitude of the signal outputted from the sensor 2 is stored in a memory device 4. The magnitude of the signal sent out of the sensor at the time of the riveting is compared with the magnitude of the stored signal in a judging device 2. When the magnitude from the sensor is larger than the

magnitude of the stored 4 signal, Ok is displayed. When the magnitude of the signal from the sensor 2 is smaller, NG is displayed. In this way, the riveting force can be made constant regardless of the length of a hose for connecting the supply source of pressure oil, which is different for every riveting machine, and the riveting machine.

#6. Japanese Patent No. 5-92300, according to an English translation of the Abstract, shows the following:

PURPOSE: To maintain and control the optimum pressing state by displaying data of a position and a load of a press jig and outputting the data to the outside. CONSTITUTION: Upper limit values H<sub>1</sub>, H<sub>2</sub>, lower limit values L<sub>1</sub>, L<sub>2</sub> of applied load increasing properties are set in advance in a pressing area, applied loads exceeding those limit values are stored in CRT/MDI unit and as occasion demands, an alarm is given. A jig is moved as far as a set position of the jig at a prescribed speed and when a detection value of the position arrives at the set position, reverse current is supplied to a driving motor to stop it suddenly. After it stops, a ball screw stops rotation for a dowel (stop) time, the pressing jig is made to return as far as the origin and variation of the position based on the spring back generated to a body to be pressed when the dowel time is not set as prevented.

- #7. Japanese Patent No. 6-061344 appears to show a rivet setting machine.
- #8. Japanese Patent No. 7-015135, according to an English translation of the Abstract, shows the following:

OBJECT: To provide a setting load measuring device having a strain-gauge type compression load transducer therein to be capable of being attached between a punch holder and a shaft portion at the lower end of a main rotating shaft in a rivet setting machine. SOLUTION: A strain gauge type compression load transducer 13 is located within a housing 11. The transducer 13

is assembled into a space between a lower end portion of a main shaft 3 and a second main shaft 9 which is inserted into the main shaft 3 by an intermediate thrust ball bearing 15. The second main shaft 9 is connected to the main shaft 3 by means of a key 8, a spring 18 and a bolt 19.

#9. Japanese Patent No. 08-261855, according to an English translation of the Abstract, shows the following:

PROBLEM TO BE SOLVED: To provide a piezoresistive pressure sensor which does not require any tap and is not affected by the mismatching of a mask. SOLUTION: A piezoresistive pressure sensor 30 is provided with four resistance diffusion regions 32 which are connected to a bridge structure 33 with four joint parts 36. Each of the diffusion region is provided with a first edge part connected to one of four junction parts and a second edge part which is connected to another one of four junction parts. Four contact diffusion terminals 34 are arranged in contact with a bridge structure. Each diffusion terminal 34 is arranged at one of four junction parts and the diffusion region is electrically connected only by the contact diffusion terminals essentially. Therefore, a tap for electrically connecting the contact diffusion terminals 34 to the resistance diffusion region of the bridge is unnecessary, thus enhancing sensor sensitivity.

|     | C. The following additional information is provided for the Examiner's consideration.  |  |  |  |  |  |
|-----|--|--|--|--|--|--|
| IV. | CROSS REFERENCE TO RELATED APPLICATION(S)  |  |  |  |  |  |
|     | A. The Examiner is advised that the following co-pending application(s contain(s) subject matter that may be related to the present application. By bringing this(these) application(s) to the Examiner's attention, Applicant(s) does (do) not waive the confidentiality provisions of 35 U.S.C. § 122. |  |  |  |  |  |

U.S. Serial No. U.S. Filing Date Art Unit

# ٧. THIS IDS IS BEING FILED UNDER A. 37 C.F.R. § 1.97(b): (check only one box) 1. within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. § 1.97(b)(1)). No fee or certification is required. 2. within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or certification is required. 3. before the mailing of a first Office Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e) below; or, if no certification has been made, charge our deposit account a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p). 4. Defore the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No fee or certification is required. B. 37 C.F.R. § 1.97(c): (check only one box) before the mailing date of either any Final Office Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution. 1. No certification; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p). 2. See the certification below. No fee is required. C. 37 C.F.R. § 1.97(d): after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee. 1. See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).

| VI.   | CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box)  |  |  |  |  |  |
|-------|--|--|--|--|--|--|
|       | The undersigned hereby certifies that:   |  |  |  |  |  |
|       | A. $\boxtimes$ each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(1)). See further statement under 37 C.F.R. 1.704(d) below in section VII, if applicable; or   |  |  |  |  |  |
|       | B. $\square$ no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)).  |  |  |  |  |  |
|       | C. some of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filling of this IDS. |  |  |  |  |  |
| VII.  | STATEMENT UNDER 37 C.F.R. 1.704(d)   |  |  |  |  |  |
|       | The undersigned hereby states that:  |  |  |  |  |  |
|       | each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this IDS.   |  |  |  |  |  |
| VIII. | PAYMENT OF FEES (check only one box)   |  |  |  |  |  |
|       | A. $\square$ A check in the amount of \$180.00 is enclosed for the above identified fee.   |  |  |  |  |  |
|       | B. Please charge Deposit Account No. <u>02-2550</u> in the amount of \$180.00 for the above-indicated fee. A duplicate copy of this paper is attached.   |  |  |  |  |  |

The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. <u>02-2550</u>.

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. <u>02-2550</u>.

Dated: Jul 11, 2007

Harness, Dickey & Pierce, P.L.C. P.O. Box 828 Bloomfield Hills, Michigan 48303 (248) 641-1600

MLF/pml

Respectfully submitted,

Reg. No. 37,617



HDP-1449 (Based on Form PTO-1449)

# PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 1 of 1

| ATTORNEY DOCKET NO. | SERIAL NO.  |  |  |  |  |
|---------------------|-------------|--|--|--|--|
| ATTORNET BOOKET NO. | Octive 140. |  |  |  |  |
| 0275M-000260/DVB    | 09/862,688  |  |  |  |  |
| APPLICANT           |             |  |  |  |  |
| D. Mauer et al.     |             |  |  |  |  |
| FILING DATE         | GROUP       |  |  |  |  |
| May 22, 2001        | 3726        |  |  |  |  |

| U.S. PATENT DOCUMENTS |                        |                    |         |              |                    |                                 |
|-----------------------|------------------------|--------------------|---------|--------------|--------------------|---------------------------------|
| Ref.<br>Desig.        | Examiner's<br>Initials | Document<br>Number | Date    | Name         | Class/<br>Subclass | (If appropriate)<br>Filing Date |
| 1.                    |                        | 6,150,917          | 11/2000 | Meyer et al. |                    |                                 |

| FOREIGN PATENT DOCUMENTS |                        |                    |         |         |                    |                    |    |
|--------------------------|------------------------|--------------------|---------|---------|--------------------|--------------------|----|
| Ref.<br>Desig.           | Examiner's<br>Initials | Document<br>Number | Date    | Country | Class/<br>Subclass | Translation<br>Yes | No |
| 1.                       |                        | 58-131939          | 09/1983 | Japan   |                    | Claim 1            |    |
| 2.                       |                        | 62-109838          | 07/1987 | Japan   |                    | Claim 1            |    |
| 3.                       |                        | 63-002534          | 01/1988 | Japan   | ·                  | Claim 1            |    |
| 4.                       |                        | 64-40132           | 02/1989 | Japan   |                    | Abstract           |    |
| 5.                       |                        | 4-169828           | 06/1992 | Japan   |                    | Abstract           |    |
| 6.                       |                        | 5-92300            | 04/1993 | Japan   |                    | Abstract           |    |
| 7.                       |                        | 6-061344           | 08/1994 | Japan   |                    | Partial            |    |
| 8.                       |                        | 7-015135           | 03/1995 | Japan   | ·                  | Abstract           |    |
| 9.                       |                        | 8-261855           | 10/1996 | Japan   |                    | Abstract           |    |

| OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.) |                        |  |  |  |
|--|------------------------|--|--|--|
| Ref.<br>Desig.   | Examiner's<br>Initials |  |  |  |
| 1.   |                        |  |  |  |

|           | · · · · · · · · · · · · · · · · · · · |                  | · · · · · · · · · · · · · · · · · · · |
|-----------|---------------------------------------|------------------|---------------------------------------|
| Examiner: |                                       | Date Considered: |                                       |